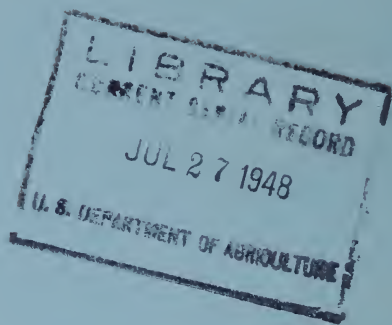


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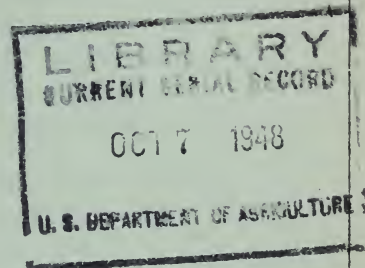
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SNOW SURVEYS AND IRRIGATION WATER FORECASTS

for the

MISSOURI-ARKANSAS RIVERS DRAINAGE BASIN

February 1, 1948



Issued by

Division of Irrigation, Soil Conservation Service
United States Department of Agriculture
and
Colorado Agricultural Experiment Station

* * * * *

Data included in this report were obtained by the agencies named above in cooperation with the U. S. Forest Service National Park Service, State Engineers of Colorado and Wyoming, and other Federal, State, and local agencies.

MISSOURI-ARKANSAS DRAINAGE BASINS

February 1, 1948

The water supply situation on the Missouri River and its tributaries in Montana is favorable. In the mountains near Helena the snow cover is in excess of last year which was well above normal. In the vicinity of Yellowstone Park snow accumulation is relatively less or about average. Throughout Wyoming the water supply outlook is good on all the principal streams. Although no snow surveys were made, the snow cover on the Bighorn should be about the same as last year. On the North Platte watershed, the snow water content is ten percent above a year ago. Reservoir storage on this stream is unusually high. Agricultural conditions in the state are reported as good. For the streams from the east slope of the mountains in Colorado the present water supply prospects are quite favorable. Snow cover on the tributaries of the South Platte and Arkansas Rivers is somewhat above normal and last year. Reservoir storage is slightly higher than on February 1, 1947. Soil Moisture conditions in all areas are good.

MISSOURI RIVER TRIBUTARIES
IN MONTANA

On the headwaters of the streams forming the Missouri River the snow cover is about normal, except on the Jefferson River, where it is better than last year and considerably better than average. In this area and in the mountains near Helena there were recorded the greatest snow depths that have occurred since 1935 on this date. In and around Yellowstone Park on the Madison, Gallatin, and Yellowstone Rivers accumulated snow cover is just below average. Stream flow is reported to be about normal. Storage in Fort Peck declined sharply in the past month and the reservoir now contains 13,130,000 acre-feet. Reservoir storage in Montana is close to the same as February 1, 1947. Soil moisture and crop conditions are good.

WYOMING

Bighorn and tributaries: No snow surveys were made on the Bighorn drainage February 1. From information based on adjacent snow courses, precipitation and reservoir storage, the water supply outlook is not quite as favorable as a year ago but better than normal.

Cheyenne: The water supply prospects appear to be good. Snow water content measured on three courses at higher elevations averages 4.3 inches as compared to 2.7 a year ago. Storage in Belle Fourche Reservoir is 140,000 acre-feet, practically the same as last year, and about 75 percent of capacity. Precipitation on the Belle Fourche project area is below normal.

North Platte. The prospective water supply on this drainage for next season is most favorable. Snow accumulation to February 1 in the mountain areas is 9 percent above average and 5 percent over last year at this time. Storage in the four principal reservoirs on this river in Wyoming now aggregates 1,338,000 acre-feet as compared to 858,000 a year ago. This increase is due to heavy seasonal flow of the stream last year and a low demand for irrigation water in the lower valley. Stream flow is near normal in both Wyoming and Nebraska. Snow cover is unusually heavy in North Park in Colorado and adjacent areas in Wyoming. Recent precipitation in irrigated areas in both states has been normal or slightly below. Range and crop conditions are reported as good. Storage in the Kingsley and Sutherland Reservoirs is now 1,544,000 acre-feet which is almost 400,000 in excess of that stored February 1, 1947.

Laramie River. As shown by February 1 surveys, the average snow water content on the headwaters of this stream was 7.3 inches where the normal is 6.0. The outlook for the next irrigation season is at present very favorable. At Laramie the snow cover is unusually heavy. In the Wheatland area precipitation has been slightly deficient but other conditions are favorable. Storage in the Wheatland reservoirs is near capacity of about 70,000 acre-feet. A year ago 21,800 acre-feet were stored.

South Platte River Basin

Cache la Poudre: Snow on this watershed is somewhat better than a year ago and 36 percent above average. The mountain and valley areas are snow covered. Reservoir storage is 10 percent above last year. The present outlook for the coming season's irrigation water supply is favorable. Soil moisture conditions are good. Stream flow is above normal.

Big Thompson. Snow water content measured on the Middle Valley snow course is 7.3 inches as compared to 7.8 a year ago. Due to a complete snow cover over the valley and foothills, the water supply outlook is at least as good as last year. Ten second-feet of water are coming into this stream from the Adams Tunnel. Reservoir storage is about 4 times the amount stored a year ago. Boyd Lake now contains 30,000 acre-feet as compared to 4,400 on February 1, 1947.

St. Vrain. No snow surveys were made on this drainage February 1. However, the snow water content of the University Camp course adjacent to this drainage is 36 percent above normal for this time of year. As for other South Platte tributaries the prospects for adequate irrigation water supply is favorable. Storage in Union Reservoir is now 10,600 acre-feet. A year ago it was 5,500 acre-feet. Soil moisture conditions are good.

Boulder Creek. Snow cover on the headwaters of this stream is particularly favorable at this time and the irrigation water supply outlook is excellent. The snow water content on the University Camp course is 14.0 inches as compared with 10.7 a year ago. Recent valley precipitation has been above average. Soil moisture, range and crop conditions are very good.

Clear Creek. The irrigation water supply prospects on this stream are similar to this time a year ago. Snow water content is 15 percent above average. Precipitation at Denver has been above normal and about ten inches of snow cover the valley area. Soil moisture conditions are described as excellent. Reservoir storage is about 10 percent above February 1, 1947.

South Platte above Denver. Storage in the mountain reservoirs, principally Denver's municipal water supply, now totals 193,400 acre-feet. A year ago at this time it was 166,000. Snow water content at Hoosier Pass is 3.1 inches as compared to 5.4 on February 1 last year. The water supply outlook is unusually good as of this date.

For the entire South Platte drainage, the over-all prospect for next season's irrigation water supply is quite favorable. As far east as Fort Morgan the area is well covered with snow and winter precipitation has been considerably above normal. Reservoir storage in the Fort Lupton area is slightly below last year but above the ten-year average. In the lower valley the Prewitt, Point of Rocks and Julesburg reservoirs now contain a total of 118,800 acre-feet of water as compared to 89,400 a year ago. Soil moisture conditions in this area are reported as fair and the snow cover is light.

Arkansas River

At this time the average water content of the snow on the headwaters of the Arkansas and its tributaries is 6.5 inches. A year ago it was 5.4. Reservoir storage in the mountain and plains area now totals approximately 294,000 acre-feet. Last year on February 1, storage in the same reservoir was 211,000 acre-feet. The mountain and plains area is snow covered to an average of about 12 inches. Recent precipitation has been much above average. Soil moisture conditions are reported from fair to good but will improve when snow melts. Snow water content on the Whiskey Creek course on the Purgatoire watershed is 60 percent above last year. The present outlook for next summer's irrigation water supply on the Arkansas is good.

SNOW SURVEYS AND IRRIGATION WATER FORECASTS
FOR MISSOURI AND ARKANSAS RIVERS
February 1, 1948

P R E C I P I T A T I O N D A T A

| WATERSHED | STATE | Precipitation October 1 to January 31 Inches | Departure from Normal Inches | Precipitation January Inches | Departure from Normal Inches |
|--------------|-------------|---|---------------------------------------|------------------------------------|---------------------------------------|
| Missouri | East. Mont. | 1.80 | -0.64 | 0.49 | -0.02 |
| Missouri | Cent. Mont. | 3.40 | +0.28 | 0.95 | +0.29 |
| Missouri | North Wyo. | 5.27 | +1.53 | 1.67 | +0.76 |
| North Platte | Wyoming | 3.66 | +0.36 | 1.05 | +0.22 |
| South Platte | Colorado | 6.56 | +2.38 | 1.85 | +1.15 |
| Arkansas | Colorado | 5.58 | +1.99 | 2.46 | +1.74 |

Accumulated precipitation since October 1, over the watersheds of the Missouri and Arkansas Rivers in Montana, Wyoming and Colorado is above normal, except in eastern Montana. January precipitation follows the same pattern.

SUMMARY OF FEBRUARY 1 SNOW SURVEYS AND COMPARISON OF DATA

WITH THAT OF PREVIOUS YEARS BY WATERSHEDS

MISSOURI-ARKANSAS DRAINAGE BASINS

| WATERSHEDS | Snow Depth | | Water Content | | Number Courses in Average | Snow Density | | 1948 Water Content in Percent of Thirteen year Avg.* | 1947 |
|-----------------------|---------------------|------|---------------------|------|---------------------------|---------------------|---------|--|------|
| | Thirteen year Avg.* | 1947 | Thirteen year Avg.* | 1948 | | Thirteen year Avg.* | 1947 | | |
| | In. | In. | In. | In. | | Percent | Percent | | |
| MISSOURI RIVER | | | | | | | | | |
| Jefferson River | 15.4 | 17.1 | 2.7 | 3.1 | 1 | 17 | 18 | 137 | 119 |
| Madison River | 34.1 | 41.1 | 8.1 | 11.1 | 3 | 24 | 27 | 97 | 70 |
| Gallatin River | 38.7 | 50.2 | 9.7 | 14.6 | 1 | 25 | 29 | 91 | 60 |
| Yellowstone River | 25.8 | 32.5 | 5.4 | 8.0 | 1 | 21 | 25 | 96 | 65 |
| Missouri River** | 23.5 | 33.3 | 5.6 | 9.2 | 4 | 24 | 28 | 170 | 103 |
| Marais River | 35.5 | 63.3 | 11.2 | 20.2 | 1 | 31 | 32 | 73 | 41 |
| Cheyenne River | 18.2 | 16.2 | 3.1 | 2.7 | 3 | 17 | 17 | 139 | 159 |
| North Platte River | 44.0 | 44.1 | 11.2 | 11.6 | 8 | 25 | 26 | 109 | 105 |
| Laramie River | 24.8 | 25.6 | 6.0 | 6.0 | 5 | 24 | 24 | 122 | 122 |
| South Platte River*** | 20.1 | 24.2 | 3.5 | 3.9 | 3 | 17 | 16 | 137 | 123 |
| Grow Creek | 13.9 | 14.5 | 2.7 | 2.6 | 1 | 19 | 18 | 170 | 177 |
| Poudre River | 21.2 | 20.1 | 5.6 | 6.5 | 3 | 26 | 32 | 136 | 117 |
| Big Thompson River | 27.3 | 38.4 | 5.8 | 7.8 | 1 | 21 | 20 | 126 | 94 |
| St. Vrain River | | | | | | | | | |
| Boulder Creek | 35.8 | 37.0 | 10.3 | 10.7 | 1 | 29 | 29 | 136 | 131 |
| Clear Creek | 34.6 | 36.2 | 7.9 | 8.8 | 2 | 23 | 24 | 111 | 100 |
| ARKANSAS RIVER | 27.2 | 27.4 | 5.7 | 5.4 | 9 | 21 | 20 | 114 | 120 |

*Come for shorter periods

**Between Helena and Great Falls

***Above Denver, Colo.

MISSOURI-ARKANSAS RIVERS SNOW SURVEYS, February 1, 1948

| DRAINAGE BASIN and SNOW COURSE | LOCATION | | | SNOW COURSE MEASUREMENTS | | | | | Past Record Av. Water Content (Inches) |
|--------------------------------------|---------------------|------|--------------------|--------------------------|-------|----------------------|---------------------------|------------------------|---|
| | No. and State | Sec. | Twp. or Lat. | Range or Long. | Elev. | Date of Survey | Snow Depth (Inches) | Water Content (Inches) | Years of Record |
| MISSOURI RIVER | | | | | | | | | |
| JEFFERSON RIVER | | | | | | | | | |
| Camp Creek* | 6 Ida. | 21 | 13N | 36E | 6800 | | | In. | |
| Picnic Grounds | Mont. | 22 | 5N | 6W | 6500 | 2/2 | 20.3 | 9.3 | 11 |
| Gibbons Pass | 10 " | 4 | 2S | 19W | 7100 | | | 3.1 | 4 |
| Pipestone Pass | 30 " | 11 | 1N | 7W | 7200 | | | 23.5 | 9 |
| | | | | Average for Drainage. | | | | 5.0 | 9 |
| | | | | | | | | 3.1 | |
| MADISON RIVER | | | | | | | | | |
| Aster Creek* | 2 Wyo. | | 44.2N | 110.6W | 7700 | | | 21.2 | 11 |
| Lewis L. Divide* | 8 " | | 44.2N | 110.7W | 7900 | | | 23.8 | 11 |
| Big Springs* | 3 Ida. | 34 | 14N | 44E | 6500 | | | 13.6 | 11 |
| W. Yellowstone | 16 Mont. | 34 | 13S | 5E | 6700 | 2/2 | 23.0 | 9.4 | 11 |
| 21-Mile* | " | 1 | 11S | 5E | 7150 | 2/2 | 34.4 | 14.6 | 11 |
| Hebgen Dam | " | 22 | 11S | 4E | 6550 | 2/2 | 36.5 | 9.2 | 11 |
| Valley View | Ida. | 7 | 15N | 44E | 6500 | | | 11.2 | 3 |
| | | | | Average for Drainage | | | | 7.8 | |
| | | | | | | | | 11.1 | |
| GALLATIN RIVER | | | | | | | | | |
| Mystic Lake #1 | Mont. | 31 | 3S | 7E | 6600 | | | 5.4 | 11 |
| Mystic Lake #2 | " | 31 | 3S | 7E | 6500 | | | 4.0 | 11 |
| 21-Mile | " | 1 | 11S | 5E | 7120 | 2/2 | 34.4 | 14.6 | 11 |
| | | | | Average for Drainage | | | | 8.8 | |
| | | | | | | | | 8.8 | |
| YELLOWSTONE RIVER | | | | | | | | | |
| Lupine Creek | 40 Wyo. | | 44.9N | 110.6W | 7300 | 2/1 | 27.9 | 8.0 | 7 |
| | | | | | | | | | |
| MISSOURI RIVER** | | | | | | | | | |
| Chessmen Res. | 6 Mont. | 2 | 8N | 5W | 6200 | 2/4 | 26.8 | 5.0 | 11 |
| Lower Rimini | 41 " | 13 | 8N | 6W | 6250 | 2/1 | 33.4 | 7.3 | 11 |
| Middle Rimini | 42 " | 13 | 8N | 6W | 6800 | 2/1 | 42.0 | 10.9 | 11 |
| Upper Rimini | 43 " | 19 | 8N | 5W | 8000 | 2/1 | 47.8 | 13.5 | 11 |
| | | | | Average for Drainage | | | | 9.2 | |
| | | | | | | | | 9.5 | |
| | | | | | | | | 2.6 | |
| | | | | | | | | 4.0 | |
| | | | | | | | | 6.5 | |
| | | | | | | | | 9.3 | |
| | | | | | | | | 5.6 | |

*On adjacent drainage

**Between Helena and Great Falls

MISSOURI-ARKANSAS RIVERS SNOW SURVEYS, February 1, 1948

| DRAINAGE BASIN and SNOW COURSE | LOCATION | | | SNOW COURSE MEASUREMENTS | | | | | | | | |
|--------------------------------------|---------------------|------|----------------------|--------------------------|-------|----------------------|---------------------------|------------------------|------|------|-----------------------|---|
| | No. and State | Sec. | Twp. | Range | Elev. | Date of Survey | Snow Depth (Inches) | Water Content (Inches) | 1947 | 1946 | Years of Record | Past Record Av. Water Content (Inches) |
| MARIAS RIVER Marias Pass | 20 Mont. | | 48.3N | 113.4W | 5250 | 2/3 | 30.4 | 8.2 | 20.2 | 12.8 | 11 | 11.2 |
| CHEYENNE RIVER Upper Spearfish | 1 S. Dak. | 21 | 3N | 1E | 6500 | 1/30 | 25.2 | 5.7 | 2.7 | 2.3 | 5 | 3.9 |
| Upper Castle | 2 " | 24 | 2N | 1E | 6800 | 1/31 | 25.9 | 4.7 | 3.1 | 2.3 | 4 | 3.3 |
| Deerfield | 3 " | 23 | 1N | 2E | 6000 | 1/30 | 17.2 | 2.6 | 2.4 | 1.2 | 5 | 2.2 |
| | | | Average for drainage | | | | 23.0 | 4.3 | 2.7 | 1.9 | | 3.1 |
| NORTH PLATTE RIVER Cameron Pass | 1 Colo. | 2 | 6N | 76W | 10300 | 1/31 | 51.4 | 13.5 | 14.2 | 12.4 | 10 | 11.3 |
| Columbine Lodge | 3 " | 21 | 5N | 82W | 9300 | 1/31 | 54.5 | 15.8 | 10.9 | 16.2 | 13 | 12.9 |
| Bottle Creek | 7 Wyo. | 24 | 14N | 85W | 8200 | 2/1 | 28.7 | 8.7 | 7.3 | 6.9 | 11 | 6.9 |
| Webber Spring | 8 " | 27 | 14N | 85W | 9000 | 2/1 | 35.4 | 10.2 | 10.8 | 9.4 | 11 | 9.0 |
| Old Battle | 9 " | 29 | 14N | 85W | 9800 | 1/31 | 54.0 | 17.7 | 21.2 | 18.7 | 11 | 17.0 |
| N. French Creek | 37 " | 27 | 16N | 80W | 10200 | 1/29 | 51.8 | 15.5 | 13.4 | 19.9 | 11 | 15.4 |
| N. Barrett Creek #2 | 38 " | 30 | 16N | 80W | 9400 | 1/28 | 43.0 | 10.2 | 9.8 | 11.2 | 11 | 10.6 |
| Ryan Park #2 | 39 " | 34 | 16N | 81W | 8400 | 1/29 | 28.8 | 5.9 | 5.1 | 4.7 | 11 | 6.1 |
| | | | Average for drainage | | | | 43.4 | 12.2 | 11.6 | 12.4 | | 11.2 |
| LARAMIE RIVER Brooklyn Lake | 3 Wyo. | 11 | 16N | 79W | 10200 | 1/31 | 41.9 | 11.9 | 12.2 | 13.9 | 11 | 11.8 |
| Fox Park | 11 " | 21 | 13N | 78W | 9200 | 1/30 | 32.2 | 6.6 | 3.9 | 6.1 | 12 | 5.0 |
| Pole Mtn. #2* | 34 " | 35 | 15N | 72W | 8700 | 1/30 | 21.6 | 4.6 | 2.6 | 1.2 | 12 | 2.7 |
| Libby Lodge #2 | 35 " | 29 | 16N | 78W | 8700 | 1/31 | 27.7 | 6.3 | 5.2 | 6.3 | 11 | 4.9 |
| Hairpin Turn #2 | 36 " | 24 | 16N | 79W | 9500 | 1/31 | 29.1 | 7.2 | 6.2 | 6.7 | 11 | 5.8 |
| | | | Average for drainage | | | | 30.5 | 7.3 | 6.0 | 6.8 | | 6.0 |
| CROW CREEK Polo Mtn. #2 | 34 Wyo. | 35 | 15N | 72W | 8700 | 1/30 | 21.6 | 4.6 | 2.6 | 1.2 | 12 | 2.7 |
| POULRE RIVER Cameron Pass | 1 Colo. | 2 | 6N | 76W | 10300 | 1/31 | 51.4 | 13.5 | 14.2 | 12.4 | 10 | 11.3 |
| Chambers Lake | 2 " | 6 | 7N | 75W | 9000 | 1/30 | 29.1 | 6.4 | 4.0 | 4.8 | 10 | 4.2 |
| Big South | 3 " | 33 | 8N | 75W | 8600 | 2/1 | 13.6 | 2.9 | 1.2 | 1.1 | 10 | 1.3 |
| | | | Average for drainage | | | | 31.4 | 7.6 | 6.5 | 6.1 | | 5.6 |
| *On adjacent drainage | | | | | | | | | | | | |

*On adjacent drainage

-3-
MISSOURI-ARKANSAS RIVERS SNOW SURVEYS, February 1, 1948

| DRAINAGE BASIN AND SNOW COURSE | LOCATION | | | | SNOW COURSE MEASUREMENTS | | | | |
|--------------------------------------|---------------------|------|------|----------------------|--------------------------|---|---------------------------|-----------------------|---|
| | No. and State | Sec. | Twp. | Range Elev. | Date of Survey | Snow Depth (Inches) MISSOURI RIVER | Water Content (Inches) | Years of Record | Past Record Av. Water Content (Inches) |
| | | | | | | | 1947 In. | 1946 In. | Record In. |
| BIG THOMPSON RIVER | | | | | | | | | |
| Lake Irene* | 65 Colo. | 8 | 5N | 10600 | | | | | |
| Hidden Valley #2 | 95 " | 23 | 5N | 9550 | 2/1 | 33.5 | 7.3 | 6.2 | 9 |
| ST. VRAIN RIVER | | | | | | | | | |
| Wild Basin | | | | | | | | | |
| BOULDER CREEK | | | | | | | | | |
| University Camp #2 | 60 Colo. | 23 | 1N | 10300 | 1/30 | 45.0 | 14.0 | 16.6 | 10 |
| CLEAR CREEK | | | | | | | | | |
| Loveland Pass #2 | 61 Colo. | 27 | 4S | 10100 | 1/30 | 38.9 | 7.3 | 10.7 | 9 |
| Grizzly Peak* | 97 " | 2 | 5S | 11250 | 1/28 | 44.1 | 10.3 | 11.8 | 7 |
| | | | | Average for Drainage | | 41.5 | 8.8 | 11.2 | |
| SOUTH PLATTE RIVER (Above Denver) | | | | | | | | | |
| Hoosier Pass | 14 Colo. | 13 | 8S | 11400 | 1/31 | 33.0 | 6.6 | 8.1 | 10 |
| Fairplay | 15 " | 33 | 9S | 10000 | 2/1 | 18.0 | 2.5 | 0.5 | 10 |
| Jefferson Cr. #2 | 83 " | 14 | 7S | 10100 | 1/31 | 32.9 | 5.4 | 6.8 | 9 |
| | | | | Average for Drainage | | 28.0 | 4.8 | 5.1 | |
| ARKANSAS RIVER | | | | | | | | | |
| Tennessee Pass | 19 Colo. | 21 | 8S | 10200 | 2/2 | 29.0 | 4.6 | 7.2 | 13 |
| Twin Lakes T. | 21 " | 22 | 11S | 10500 | 1/30 | 30.0 | 6.1 | 7.1 | 11 |
| Marshall Cr.* | 42 " | 24 | 4SN | 10800 | 2/1 | 31.3 | 5.8 | 5.3 | 13 |
| Poncha Cr. | 43 " | 19 | 4SN | 10500 | 2/1 | 25.7 | 6.2 | 4.7 | 13 |
| Whiskey Cr. #2 | 72 " | 37 | 2N | 105.2W | 1/30 | 22.3 | 5.5 | 2.1 | 9 |
| La Veta Pass #2* | 74 " | 22 | 28S | 9300 | 1/30 | 37.4 | 7.0 | 3.3 | 9 |
| Four Mile Park #2 | 78 " | 23 | 11S | 9700 | 2/2 | 18.5 | 3.5 | 4.7 | 9 |
| Fremont Pass #2* | 79 " | 2 | 8S | 11400 | 1/29 | 49.6 | 9.4 | 11.4 | 13 |
| Monarch Pass | 92 " | 16 | 49N | 10500 | 1/30 | 44.9 | 10.1 | 10.8 | 8 |
| | | | | Average for drainage | | 32.1 | 6.5 | 6.3 | |

*On adjacent drainage

The following organizations cooperate in the snow surveys and irrigation water supply forecasts for the Colorado, Missouri-Arkansas and Rio Grande watersheds by furnishing funds or services.

STATE

Colorado State Engineer
Wyoming State Engineer
Utah State Engineer
New Mexico State Engineer
Montana State Engineer
Nebraska State Engineer
Colorado Experiment Station
Colorado Extension Service
Montana Experiment Station
Utah Experiment Station

FEDERAL

Department of Agriculture
Forest Service
Soil Conservation Service
Department of Interior
Bureau of Reclamation
Geological Survey
National Park Service
Department of Commerce
Weather Bureau
War Department
Army Engineer Corps

PUBLIC UTILITIES

Colorado Public Service Company
Western Colorado Power Company
Montana Power Company
Public Service Company of New Mexico
Denver and Rio Grande Western R. R. Company

MUNICIPALITIES

City of Bozeman
City of Denver
City of Boulder

WATER USERS ORGANIZATIONS

Poudre Valley Water Users' Association
Arkansas Valley Ditch Association
Colorado River Water Conservation District

IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company
San Luis Valley Irrigation District
Santa Maria Reservoir Company
Costilla Land Company
Uncompahgre Valley Water Users' Association
Wyoming Development Company
Goshen Irrigation District
Kendrick Project
Pathfinder Irrigation District
Salt River Valley Water Users' Association
San Carlos Irrigation and Drainage District
Twin Lakes Reservoir and Canal Company

Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

